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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,260	12/07/2001	Hsin-Chin Chang	B-4426 619387-7	2775

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EXAMINER

TAYLOR, BARRY W

ART UNIT PAPER NUMBER

2643

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/014,260	Applicant(s) CHANG ET AL.	
	Examiner Barry W. Taylor	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-7, 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (5,551,077) in view of Ricordel (6,795,913).

Regarding claim 1. Oda teaches a portable electronic device with power failure recovery (title, abstract), powered by a main power source (see item 2 figure 1), comprising:

a power detection and management module (item 4 figure 1), detecting an output characteristic from the main power source (item 2 figure 1), for asserting an interrupt signal if the detected output characteristic is below a first threshold (see col. 4 lines 17-56 wherein interrupt issued to CPU 5 by using clock 6);

a timing unit, responsive to the enable signal, for asserting a notification signal at a predetermined time interval when the enable signal is asserted, wherein the timing unit is directly power by a backup power source (see clock 6 figure 1 powered by auxiliary power source 3); and

power detection and management unit (item 4 figure 1), electrically coupled to the main power source and the backup power source (see item 4 figure 1 connected to both main power 2 and auxiliary power 3), for disconnecting the main power source to a circuit block with the high power consumption when the turn-off signal is asserted (see figure 1 wherein power management unit 4 disconnects main power circuit 10 and uses secondary circuit 9), and for reconnecting the main power source to the circuit block with higher power consumption see figure 1 wherein power management unit 4 disconnects main power circuit 10 and uses secondary circuit 9).

Oda does not explicitly show the using a processor to turn off main power and reconnect main power.

Ricordel teaches main power source (item 15 figure 1) used to charge backup power supply (item 17 figure 1), a power cut detection circuit (item 20 figure 1) used to issue interrupt signal to processor (item 10 figure 1) allowing the processor to resume operation in response to a very brief power cut (col. 1 lines 14-50, col. 2 lines 4-26).

Art Unit: 2643

It would have been obvious to any one of ordinary skill in the art at the time of invention to utilize the teachings of Ricordel into the teachings of Oda in order to reduce switching off the telephone when a brief interrupt in power is detected.

Regarding claim 2. Oda teaches memory powered by the backup power (see item 3 figure 1 used to power memory via power line 9 when main power fails).

Regarding claim 3. Oda teaches CPU performs a resume operation (col. 2 lines 28-36).

Regarding claims 4 and 14. Oda teaches the timing unit (see clock 6 figure 1) includes clock for keeping track of ongoing time (see column 4).

Regarding claims 5 and 15. Oda teaches the auxiliary power charged by main power (see capacitor item 3 figure 1 recharged by main power 2).

Regarding claims 6 and 16. Oda teaches the auxiliary power charged by power management unit (see item 4 figure 1 used to charge capacitor 3).

Regarding claim 7. Oda teaches the main power source is a removable battery (see figure 1 wherein battery depicted as being removable).

Regarding claim 9. Oda teaches capacitor used (item 3 figure 1).

Regarding claims 10 and 17. Oda teaches measuring voltage to determine power failure (col. 4 lines 18-56).

Regarding claims 11 and 18. Oda teaches high consumption parts of radio and CPU (see 5 and 8 figure 1).

Regarding claims 12 and 19. Oda teaches memory (item 7 figure 1) must have power (see power line 9) to retain data (hence "static RAM").

Regarding claim 13. Claim 13 is rejected for the same reasons as claims 1-3 listed above since claim 13 is a combination of claims 1-3.

Regarding claim 20. Method claim 20 is rejected for the same reasons as apparatus claim 1 since the recited apparatus would perform the claimed method steps.

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (5,551,077) in view of Ricordel (6,795,913) further in view of Metroka et al (5,036,532 hereinafter Metroka).

Regarding claim 8. Oda in view of Ricordel fail to show auxiliary power is a built-in battery.

Metroka teaches main power (300 figure 1) charging capacitor (418 figure 1) to provide power to RAM for approximately 4 seconds when main power fails (col. 3 lines 53-65). Metroka also teaches built-in battery (424 figure 1) may be used to provide a longer time for power to be provided to RAM when main power removed.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Metroka into the teachings of Oda in view of Ricordel in order to allow a longer time period when main power fails.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Friday, 8am to 5pm.

Art Unit: 2643

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (571) 272-7499. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (**571-273-8300**).

A handwritten signature in black ink, appearing to read "Barry W. Taylor", with a long horizontal line extending to the right.

Barry W. Taylor
Patent Examiner
Technology Center 2600
Art Unit 2643